

22
C2
C3
projections (1a'') extending from a bottom surface of each support structure, such that the open center of the joint piece (x) receives one support projection from each of the surface structures connected by the joint arrangement. The height of the support projections (1a'') corresponds essentially with the thickness of the joint piece.

REMARKS

The Applicant respectfully requests the Examiner to reconsider the application as amended. In the Office Action, the Examiner indicated that the claims contained allowable subject matter, but that the Drawings, Specification and Abstract contained informalities and the claims were in part indefinite. It is hoped that with this Amendment all informalities have been corrected such that the next Office Action will be a Notice of Allowance.

Claims 1-13 remain pending in this application. Claim 1 has been amended to more clearly define the invention in response to the Examiner's objections to claim form. For the Examiner's convenience, claims 1-13 in their present form have been reproduced in the attached Appendix I, wherein the amendments to claim 1 have been shown in marked-up fashion.

Claims 1-13 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Applicant has amended claim 1 to overcome the rejection. Applicant traverses as to claim 7. Claim 1 has been amended to make clear that the platform structures (1a'') protrude from the bottom surface of the support structure and define recesses (1a') therebetween. The frame part of the joint piece (x) fits within the recess (1a'). The frame part has a thickness that corresponds essentially to the height of the recesses (1a').

As to claim 7, one example of a support projection is the platform structure (1a'') that extends from the bottom surface of the support structure as shown in FIGs. 2b and 2c. A support projection from each support structure is received within the open center defined by the parallelogram-shaped frame structure of the joint means when the support structures are joined

together with the joint means. The Examiner appears to have read "support projection" to mean the locking means (y1) projecting from the frame structure. The support projections (1a") extend from the support structure, whereas the locking means protrude from the frame (x1) of the joint piece. When the frame structure (x1) of the joint means is fitted into the recesses (1a') between the support projections (1a"), the open center formed by the frame structure of the joint means receives the support projections. Concurrently, the locking means (y1) engage the recesses (y2) in the surface structures. Thus, claim 7 is sufficiently definite in reciting "said joint means forming a parallelogram frame structure with an open center that receives one support projection from each of the surface structures".

Figures 2b and 2c have been amended to delete reference numeral 1a to improve clarity. The support projections 1a" extend from the bottom surface of each surface structure. The support projections 1a" are separated from one another by recesses 1a'. Applicant believes the proposed amendment corrects the noted deficiency. The specification has been amended to delete further reference to 1a.

The Specification has been amended in an effort to correct grammatical errors noted by the Examiner. The Office Action identified two informalities, which have been corrected. If other grammatical errors are evident to the Examiner, the Examiner is invited to contact the undersigned attorney by telephone to identify such errors to permit the Applicant to overcome the objection.

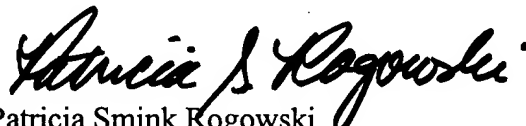
The Abstract has been amended so that it does not exceed the 150 word limit. The amended Abstract eliminates the phrases to which the Examiner objected.

In the event the Examiner believes an interview might serve to advance the prosecution of this application in any way, the undersigned attorney is available at the telephone number noted below. Applicant's undersigned attorney requests a telephone interview before the

Examiner issues a further Office Action if there is any reason the Examiner believes the application as amended should not be allowed.

No fee is believed due before the Examiner may consider this Response and Amendment. Should the Commissioner find that any fee is due before the Examiner may consider this paper, including any fee for an extension of time under 37 CFR §1.136 and 37 CFR §1.17, such extension is requested and the Commissioner is authorized to charge the fee to Deposit Account No. 03-2775.

Respectfully submitted,
CONNOLLY BOVE LODGE & HUTZ LLP

By: 
Patricia Smink Rogowski
Registration No. 33,791
1220 Market Street
Post Office Box 2207
Wilmington, Delaware 19899-2207
(302) 658-9141
Attorneys for Applicant

Date: September 19, 2002

Enclosure

Appendix I (Marked up version of amended claims 1 and 7;
Other claims reproduced for ease of reference.)

Appendix II (Marked up version of amended Abstract)

Appendix III (Marked up version of amended Specification)

Appendix IV (Clean version of amended Specification)

Appendix V (Figures 2b and 2c as amended)

APPENDIX I

Amended Claims are in marked-up form to show changes.

Pending Claims in 09/402,121

1. (Fourth amendment) Joint arrangement for a surface structure, which surface structure, together with one or several other surface structures, is intended for temporarily protecting and covering a ground surface, each surface structure having ~~{{(a)}~~ one or more corners, ~~{{(b)}~~ at least one joint arrangement for removable attachment of one or several adjacent surface structures, and ~~{{(c)}~~ thermal insulation (1) that comprises at least one essentially plastic based thermal insulation layer (1'), and wherein the joint arrangement comprises a joint piece (x), that is to be coupled by means of a locking assembly (y), for coupling of the adjacent surface structures with each other essentially by the corners of the surface structures, which joint piece (x) comprises a right-angled frame part defining one or more corners, and wherein the locking assembly (y) ~~[is arranged by]~~ ⁴⁴ has projections (y1) placed at the corners of the frame part and ~~[by]~~ ⁴⁴ recesses (y2) of the same shape that are placed underside the surface structure, and wherein an integral support arrangement ~~{{(1a)}~~ that comprises one or more [a] platform structures (1a'') projecting [s] from the bottom surface of the surface structure beyond a basic wall thickness (s) of the surface structure, **characterized** in that: one or more recesses (1a') are defined between adjacent platform structures and the frame part (x1) of the joint piece (x) has an open center, and at least a portion of the frame part (x1) fits within the recesses (1a') ~~[one or more recesses (1a') existing in the platform structure pass into the open center]~~, whereby the height of the recesses (1a') corresponds essentially to the thickness (h) of the frame part (x1).

2. Joint arrangement according to claim 1, **characterized** in that: the platform structure has one or more square shaped platforms (1a''), that are placed over the bottom surface of the surface

structure, and the platforms (1a") embed into the open center of the frame part (x1) of the joint piece.

3. Joint arrangement according to claim 1, **characterized** in that: recesses (y2) are arranged at each corner of the surface structure.

4. Joint arrangement according to claim 1 in which the joint arrangement comprises coupling means (z) having male and female couplers (z1, z2) placed at the outer edges of the surface structure, **characterized** in that: both the male and female couplers (z1, z2) are arranged at opposite outer edges of the surface structure.

5. Joint arrangement according to claim 4, characterized in that: the male couplers (z1) are projections that are placed at the lower edges of the longitudinal (p1) outer edges of the surface structure, and the corresponding female couplers (z2) are recesses in the lower edges of the crosswise (p2) outer edges.

6. Joint arrangement according to claim 4, **characterized** in that: the male and female couplers (z1, z2) comprise an auxiliary support/sealing assembly (z3) having counterpart surfaces placed at the upper edge of the outer surface of the surface structure at an angle (α), which deviates from vertical.

7. A temporary ground covering, comprising:

a plurality of surface structures each having a substantially planar top surface of thermal insulation and a bottom surface from which support projections extend;

a joint means for removably connecting the plurality of surface structures;

said joint means forming a parallelogram frame structure with an open center that receives one support projection from each of the surface structures; and

said joint means having four locking means, projecting from and forming an essentially normal angle with a substantially planar surface of the frame structure at each corner, each for interlocking with a corresponding recess member formed in a bottom surface corner of one attached surface structure, wherein

said support projections of each support structure lift the surface structure to form a gap between the ground surface and portions of the bottom surface not having support projections extending beneath them, and

the height of each support projection corresponds essentially with the thickness of the frame structure.

8. The temporary ground covering of claim 7, wherein:

the open center of the frame structure receives a support projection from each of four surface structures attached to the joint means.

9. The temporary ground covering of claim 7, wherein:

the joint means has eight locking means, two at each corner of the frame structure, and the two locking means at each corner of the frame structure interlock with two corresponding recess members formed in a bottom surface corner of one attached surface structure.

10. The temporary ground covering of claim 7, wherein:

the top surface of each surface structure is essentially square shaped; and

each surface structure has a coupling means, having a male coupler or a female coupler arranged on each side edge of the surface structure with the male and female couplers formed opposite one another, for coupling the side edges of each surface structure to the side edges of other surface structures.

11. The temporary ground covering of claim 10, wherein:

each male coupler has a side projection extending from a lower portion of the side edge and each female coupler has a corresponding recess on a lower portion of the side edge for mating with the side projection of the connected male coupler.

12. The temporary ground covering of claim 10, wherein:

the male and female couplers comprise a sealing means, having counterpart surfaces formed on an upper portion of their respective side edges, for sealing the joined edges of connected surface structures, and

the counterpart surfaces form an angle that deviates from a normal line of the top surface.

13. The temporary ground covering of claim 12, wherein:

the angle the counterpart surfaces form with the normal line of the top surface is approximately 15 degrees.

APPENDIX II

Amended Abstract marked-up to show changes.

ABSTRACT

~~[The invention relates to a joint arrangement for a]~~ A temporary ground covering is formed with a plurality of removable surface structures. Each surface structure is removably attachable to an adjacent surface structure essentially by the corners of such surface structures with a joint arrangement. The joint arrangement has f, such as a protecting plate, element or the like, which surface structure is meant particularly for covering of ground together with one or several other surface structures for temporary protecting, coating and/or like of the ground. In connection with the surface structure there has been arranged at least a joint arrangement for removable attachment of one or several adjacent surface structures to the same and the thermal insulation (1), that comprises at least one, essentially plastic based, such as cellular, expanded, foamed plastic structured or a like thermal insulation layer (1'). The joint arrangement comprises] a joint piece (x) forming a frame defining an open center and f, by means of which the surface structures may be coupled with each other essentially by corners of the same by means of] having a locking assembly (y) associated therewith that has projections (y1) that engage recesses (y2) in the surface structures [operating advantageously] by quick-locking principle. The joint piece (x) nests within one or more recesses (1a') between support projections (1a'') extending from a bottom surface of each support structure, such that the open center of the joint piece (x) receives one support projection from each of the surface structures connected by the joint arrangement. The height of the support projections (1a'') corresponds essentially with the thickness of the joint piece.

APPENDIX III

Amendments to the specification, marked-up to show changes.

Joint arrangement

FIELD OF THE INVENTION

The invention relates to a joint arrangement for a surface structure, such as a protecting plate, element or [a] the like, which surface structure ~~[is meant particularly for covering of ground]~~ together with one or several other surface structures is meant particularly for use as a temporary ground covering for ~~[temporary]~~ temporarily protecting [;] or coating and/or the like of the ground. In connection with each surface structure there has been arranged at least a joint arrangement for removable attachment of one or several adjacent surface structures to ~~[the same]~~ one another and a thermal insulation ~~[that]~~. The joint arrangement comprises at least one [;] essentially plastic based, such as cellular, expanded, foamed plastic structured or a like thermal insulation layer. The joint arrangement further comprises a joint piece [;] that is to be coupled by means of a locking assembly [;] for coupling of the adjacent surface structures with each other essentially by the corners of the ~~[same]~~ the surface structures. ~~[which]~~ The joint piece comprises a frame part having [known such as] a generally right-angled geometric shape, such as a square-shape or a parallelogram. [; such as a square shaped frame part, whereby the] The locking assembly is arranged by projections placed at the corners of the frame part and extending therefrom, and preferably by recesses of the same shape [;] that are placed on the underside of the surface structure. To the bottom surface of the surface structure there has been arranged preferably an integral support arrangement [;] that comprises a platform structure projecting from the basic wall thickness of the surface structure ~~[; such as the thermal insulation layer]~~.

BACKGROUND OF THE INVENTION

For the purpose above, particularly for covering a field of grass or ~~[e.g. of]~~ ice, it is previously known to use most heterogeneous arrangements. For example, covering elements being sold nowadays by ~~[the name]~~ under the trademark TERRAPLAS represent particularly more developed solutions [;] that are made of plastics by injection moulding. To minimize the mass of the prior ground covering element in question, it has been produced as a perforated structure in such a way [;] that ~~[not any]~~ no actual thermal insulation effect may be achieved by ~~[the]~~ this covering element. Correspondingly, the support arrangements to support the covering elements on or against the ground must furthermore be attached to the covering elements by means of totally separate auxiliary devices, which are assembled together ~~[and]~~ in different work stages. In addition to this, locking arrangements connecting the covering elements to each other must be attached separately as well, so that a uniform and seamless covering may be achieved by ~~[the]~~ this type of covering elements. The “perforated” structure of the type of covering element above also does not ~~[either]~~ enable exploitation of a so called green house ~~[phenomen]~~ phenomenon, particularly in connection with installing the covering elements over a grass field.

The perforated structure of the covering element ~~[in question]~~ of the prior art is naturally advantageous with a view to the breathing of or airflow to the ground, but the perforation causes, in addition to a “rough appearance and ~~[to these]~~ the thermal insulation problems ~~[being]~~ described above, ~~[such disadvantage as well, that]~~ it to be possible for garbage ~~[may get collect]~~ to collect between the covering and the ground. This disadvantage ~~[which]~~ naturally eliminates good points of the “perforated” covering element ~~[in question in this respect]~~.

On the other hand, it is previously known to use ~~[e.g.]~~ styrox that has been surrounded by both

sides of the same by plywood plate, particularly for covering [of] ice fields. [, that has been surrounded by both sides of the same by plywood plate.] This type of solution is naturally not applicable as such to be installed particularly on a grass field, in which case [in case not] totally separate foot structures are not being used to raise the covering structure apart from the ground. On the other hand, when being used in connection with an ice field, such ground covering causes problems because [problem of this type of solution has been found that] the plywood plates tend to freeze to the ice, [that is why] making loosening of the same [is] laborious. In addition, [to that the] this type of construction [constructions are] is very heavy, making [that is why] storing as well as use of the [same] covering for actual coating of the ground is disproportionately difficult.

On the other hand, Finnish Patent Application No. 964199 discloses a protective structure, the thermal insulation of which comprises advantageously a plastic based, such as cellular, expanded, foamed plastic [structured] structure and/or a like thermal insulation layer, to the bottom surface of which there has been arranged an integral support arrangement [;] that comprises a platform structure projecting from the basic wall thickness of the thermal insulation layer particularly in order to achieve an air space between the protective structure and the ground under the [same] structure.

The solution in question from this Finnish application is very advantageous in practice [; which is due to the fact, that] because the thermal insulation placed between the ground and the protective structure gets more efficient thanks to the air space between the protective structure and the ground. In this case, the feet [;] that are arranged as an integral platform structure directly to the bottom surface of the thermal insulation layer, prevent [first of all] so called

burning of the grass that is left under the protective structure. In the prior application [~~in question~~] there has been shown furthermore an advantageous embodiment for coupling [~~of~~] the protective structures together with each other by means of joint arrangements. [~~that~~] The joint arrangements are arranged to the protective structures in an integral manner during manufacturing of the same, and [~~that~~] operate e.g. by quick-locking principle. During tests in practice, it has been found [~~justified to improve particularly~~] that the joint arrangement coupling the protective structures with each other in such respect [;] could be improved so that the protective structures could be on the [~~either~~] one hand assembled as easily as possible, but however locked in connection with each other reliably and seamlessly.

As another example, [~~E-g.~~] application document DE 27 17 625 discloses a covering assembly [;] that is applicable [~~for~~] as a temporary ground covering [~~of ground~~] in principle, wherein three or four covering elements [~~being~~] are placed on the ground and are [~~being~~] attached by means of a joint piece coupling the covering elements together by the corners of the same. [~~and that~~] The ground covering has holding rings of suitable shape for arrowlike locking pins [;] that are placed at the corners of the covering elements. The joint pieces [~~being used in this solutions~~] are placed, however, essentially underneath the actual covering elements. That is why they must be sunk into the ground, [~~that is why~~] and why they are not applicable as such to be used in connection with the type of thin surface structures as being discussed in this connection.

On the other hand, application document DE 25 58 967 discloses a base structure arrangement [;] that is to be put together e.g. by stone based elements, in which e.g. four bottom plates are being attached by corners of the same by means of a square shaped joint piece. At the corners of the same there are pins [;] that may be attached to corresponding holes being placed at the corners of

the bottom plate. This solution is not ~~[either]~~ applicable to be used for the type of use of the invention ~~[in question]~~ of the present applicant, because the bottom plates get supported by the corners of the same on the joint pieces. That is why ~~[with the type of solution as such,]~~ an entirety operating satisfactorily enough may not be achieved in connection with thin plastic structured covering elements being included in invention in question.

Furthermore, application document DE 44 14 341 discloses separate joint arrangements to be used for connecting of concrete plates [;] that are intended for the corresponding purpose as the above application document. This solution is not ~~[as described above either]~~ applicable to be used for the type of use of the invention in question of the present applicant, ~~[whereby]~~ because an adequately functioning entirety may not be achieved ~~[either]~~, particularly when being used in connection with thin plastic structured covering elements.

SUMMARY OF THE INVENTION

It is the aim of the joint arrangement according to this invention to achieve a decisive improvement for this purpose, in other words particularly for making the installation of a removable covering structure more efficient, and for securing staying together of the ~~[same]~~ covering structure, and thus to raise substantially the level of the prior art. To achieve this aim, the joint arrangement according to the invention is primarily characterized in [;] that the frame part of the joint piece, ~~[that]~~ which joint piece has an open center, such as a framework-like structure, is arranged to pass or fit into the recesses existing in the platform structure, whereby the height of the recesses is arranged or selected to correspond essentially at least to the thickness of the frame part.

~~[As the]~~ The most important advantages of the joint arrangement according to the invention ~~[may be mentioned]~~ include easy installation of the surface structures enabled by a joint piece ~~[belonging to the same],~~ as well as simplicity and technical workability of the construction and manufacturing of the surface structures and joint piece ~~[of the same as well]~~. The invention enables ~~[first of all]~~ a very smooth covering, which is applicable for most heterogeneous purposes, that is carried out by joint pieces [;] that remain out of sight under the corners of the surface structures during the installation phase, whereby the surface structures to be coupled with each other may be connected to each other very quickly to form a surface structure [;] that is adequately smooth and seamless. As an advantageous embodiment, the joint piece has a square shaped framework, such as a parallelogram, by means of which e.g. four surface structures may be connected with each other by means of one joint piece operating by quick-locking principle [; ~~e.g. by cooperation of locking recesses, that are placed at the corners of the same, and]~~. P[p]rojections [; that] are placed at the corners of the joint piece. The projections cooperate with locking recesses formed in the corners of the support structures. As an advantageous embodiment, the frame part of the joint piece is arranged ~~[furthermore]~~ to pass the recesses of the platform structure in such a way [;] that the total thickness of the surface is not increased ~~[therefore]~~ thereby. Furthermore, when male couplers [;] that are placed advantageously at opposite edges of each surface structure, and female couplers [;] that are placed correspondingly at opposite edges, are being used, with such couplers ~~[and that are]~~ being placed furthermore at the bottom edges of the outer edges of the surface structures, the covering structure may be coupled in an extremely simple way by continuously “dropping” the ~~[following]~~ next surface structure to be installed from above to its place, and by connecting the same to the already installed surface structures at the corners by means of joint pieces ~~[by corners of the same]~~.

Advantageous ~~[embodiment]~~ embodiments of the joint arrangement according to the invention are represented in the dependent claims related to the same.

BRIEF DESCRIPTION OF THE DRAWINGS

In the following description, the invention is illustrated in greater detail with reference to the appended drawings, in which:

Fig. 1 shows one advantageous surface structure related to the joint arrangement according to the invention,

Figs 2a – 2c

show furthermore the surface structure being shown in ~~[fig.]~~ Fig. 1 as a detail seen from above (Fig. 2a), and some advantageous coupling means arrangements as partial side-views for the part of female couplers (Fig. 2b) and male couplers (Fig. 2c), and

Figs 3a – 3b

show an advantageous joint piece belonging to the joint arrangement according to the invention as a side-view and seen from above.

DETAILED DESCRIPTION OF THE INVENTION

The invention relates to a joint arrangement for a surface structure, such as a protecting plate, element or ~~[a]~~ the like, which ~~[surface structure is meant particularly for covering of ground]~~ together with one or several other surface structures creates a temporary ground covering ~~[for temporary protecting, coating and/or like of the ground]~~. In connection with each surface structure there has been arranged at least a joint arrangement for removable attachment of one or several adjacent surface structures ~~[to the same]~~, and thermal insulation ~~[+]~~ that comprises at

least one, essentially plastic based, such as cellular, expanded, foamed plastic structured or a like thermal insulation layer [1²] 1.

The joint arrangement comprises a joint piece x [5] that is to be coupled by means of a locking assembly y, for coupling [of] the adjacent surface structures with each other essentially by their corners [of the same, which]. [joint] Joint piece x comprises a geometric shape [known as] such as a right-angled parallelogram [such as] or a square shaped frame part. [whereby the] The locking assembly [y] is arranged by projections y1 placed at the corners of the frame part, and preferably by recesses y2 of [the same] a shape adapted to receive the projections y1, [that] which recesses y2 are placed underside the surface structure.

To the bottom surface of the surface structure there has been arranged preferably an integral support arrangement [1a, that comprises a] comprised of one or more platform [structure] structures 1a'' projecting from the basic wall thickness s of the surface structure, such as the thermal insulation layer [1²] 1. The platform structures 1a'' are separated by recesses 1a'. The frame part x1 of the joint piece x [5] that has an open center, such as a frame-work like structure, is arranged to pass or fit into the recesses 1a' existing in the platform structure [1a], whereby the height of the recesses is arranged to correspond essentially at least to the thickness h of the frame part x1.

With reference particularly to figs. 1 and 2, at each corner of the surface structure there has been

arranged two recesses y_2 , one after the other at each side. ~~[This enables first of all that, that]~~

With this configuration, with only one joint piece x , e.g. as shown in figs 3a and 3b, it is possible to couple four surface structures with each other by ~~[the]~~ their corners ~~[of the same]~~ or ~~[e.g. when a straight gable edge is being formed]~~ to couple only two surface structures side by side to form, for example, a straight gable edge.

Furthermore with reference to fig. 2a, the platform structure ~~[1a]~~ is arranged by single and square shaped platforms $1a''$ ~~[;]~~ that are placed advantageously all over the bottom surface of the surface structure, whereby the frame part x_1 of the joint piece is arranged to fit within the recesses $1a'$ between platforms $1a''$ and embed preferably ~~[-for]~~ four platforms $1a''$.

As an advantageous embodiment, the surface structures are square shaped, the dimensions of which are e.g. 1500 x 1500 mm~~[-in which case]~~ and the joint arrangement comprises coupling means z , such as male-female couplers z_1, z_2 ~~[being]~~ placed at the outer edges of the surface structure. ~~[-that are carried out in the solution according to the invention advantageously in a way that both]~~ Both the male and female couplers z_1, z_2 are arranged at opposite outer edges of the surface structure as shown in fig. 1. Furthermore, as an advantageous embodiment with reference particularly to figs 2b and 2c, the male couplers z_1 are arranged by projections being placed at the lower edges of the longitudinal p_1 outer edges of the surface structure, and correspondingly the female couplers z_2 are arranged by recesses being placed at the lower edges of the crosswise ~~[p2]~~ outer edges p_2 . ~~[In this way particularly]~~ Using the male and female

couplers z1 and z2, a subsequent [coupling of the surface structures] surface structure may be coupled to a surface structure already installed over a ground surface. [with each other is enabled in a way, that the following surface structure to be installed may be attached to the surface structures, that are installed already on the ground, after coupling of the] The male coupler z1 existing at the outer edge of the [same] installed surface structure is coupled to the next surface structure by lowering the next surface structure into place adjacent the installed surface structure, so that the [thereafter the outer surface being equipped with] female coupler z2 [essentially freely from above to its place] mates with the male coupler z1. [and by locking the] The corners of the [same to the above] adjacent surface structures are then locked together by means of joint [pieces] piece x.

Furthermore, as an advantageous embodiment with reference to the views shown particularly in figs 2b and 2c, the male and female couplers z1, z2 comprise [furthermore] an auxiliary support/sealing assembly z3 [—that is carried out by such as] wherein counterpart surfaces [or the like being placed] at the upper edge of the outer surface of the surface structure deviate essentially from the vertical direction at an angle α , [that deviates essentially from the vertical direction,] preferably at an angle of 15° and [being] are directed to opposite direction and/or to the same direction in respect to the surface structure. With counterpart surfaces being directed to opposite directions, it is first of all possible to achieve an auxiliary locking arrangement of a so called snap-joint type, and [by means of] with counterpart surfaces being directed to the same direction as shown in figs 2b and 2c, the joint between the surface structures may get sealed.

~~[It is obvious, that the]~~ The invention is not limited to the embodiments presented or described above, but it can be modified within the basic idea, even to a great extent. In this connection it is naturally possible to equip the surface structure to be used in connection with the joint arrangement more abundantly by exploiting e.g. separate support arrangements according to traditional practice or auxiliary reinforcing plates or the like in the surface structures. It is furthermore naturally possible to ~~[put up]~~ install each single surface structure e.g. of several frame parts, that are connected to each other by suitable fastening arrangements either during manufacturing ~~[or that may be put together]~~ during installation ~~[in]~~ on site. In this connection the surface structures may be connected by other types of joint pieces also, deviating from the type of joint piece being shown above, such as joint pieces which reach ~~[e.g.]~~ further to the center parts of the support structure.

It is furthermore naturally possible to use different kinds of coatings~~[-also,]~~ for coating ~~[of the surface structure]~~ either ~~[by]~~ the upper surface or the bottom surface of the ~~[same]~~ surface structure. Correspondingly, the surface structure as such, or the thermal insulation layer belonging to the ~~[same]~~ surface structure, may be made of EPS-material, such as expanded polystyrene foam or styrox, XPS-material, such as extruded polystyrene foam, EPP-material, such as extruded polyethylene foam or e.g. extruded PVC-structural foam sheet. In a corresponding manner it is naturally possible to make the joint piece belonging to the joint arrangement of most heterogeneous materials, such as of wood, metal, plastics, reinforced

plastics, ceramics, etc.

What is claimed is:



2/3

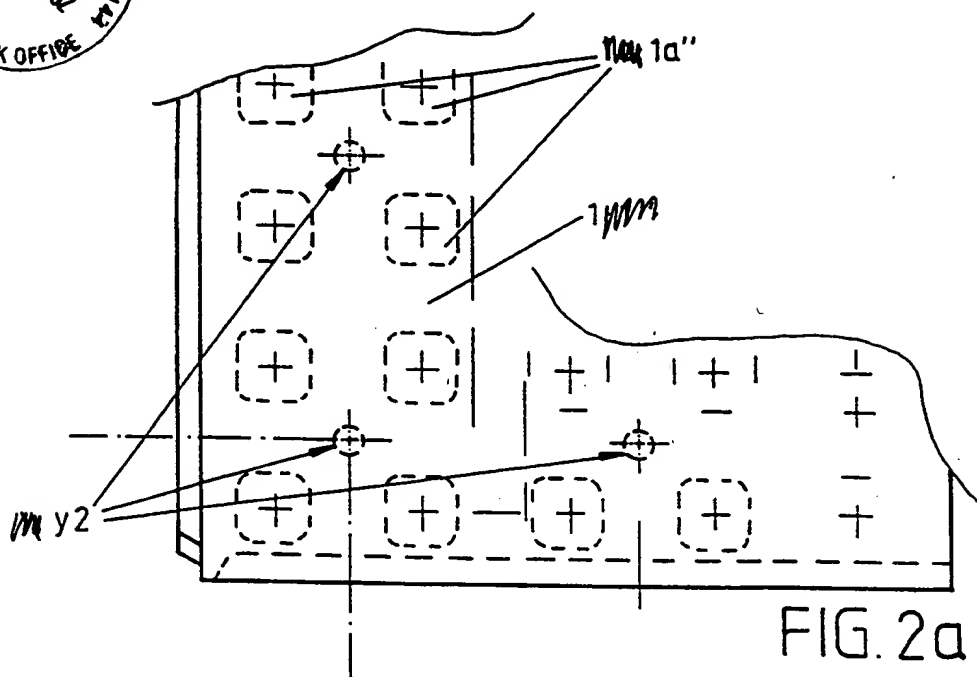


FIG. 2a

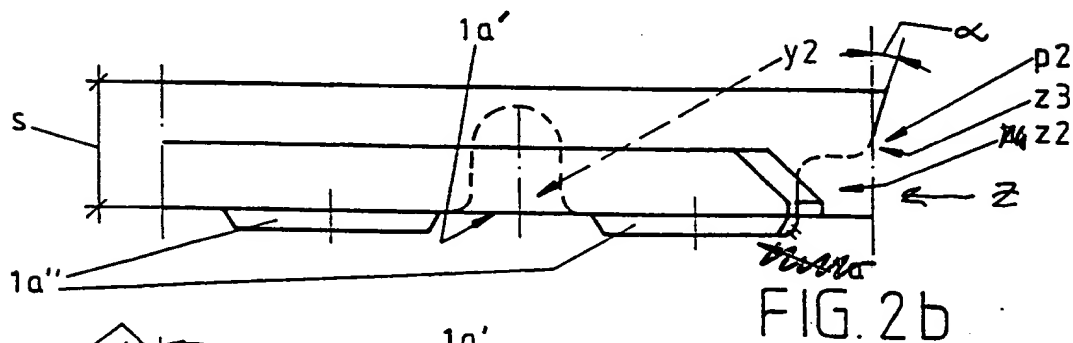


FIG. 2b

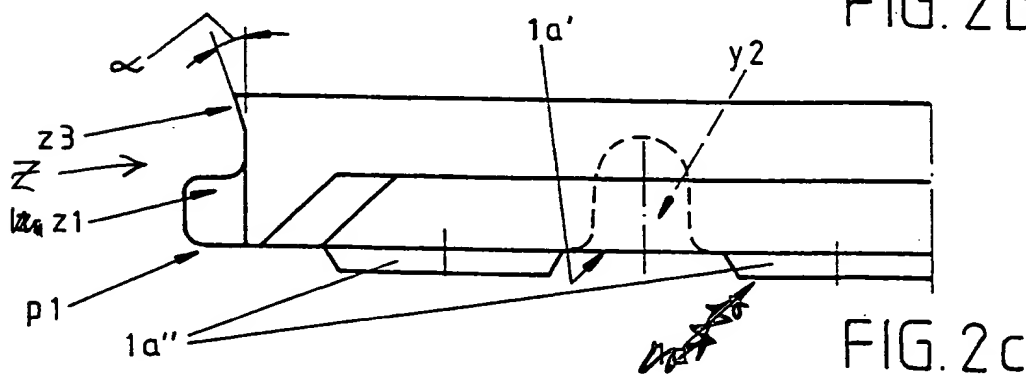


FIG. 2c

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